

***Peromyscopsylla hamifer hamifer* (Rothschild):**
an Addition to the
Entomological Fauna of New York State¹

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The most complete list of fleas of New York, that of Geary (1959), includes 43 species recorded from the state. Several species known to occur in nearby states may be expected to occur in New York, and the total number of flea species in the state should be about 50.

Collections of the New York State Museum and Science Service, made by Dr. Paul Connor, have done much to clarify the distributional patterns of New York fleas. The first new species for the state to be found in their collections is a single male specimen of *Peromyscopsylla hamifer hamifer* (Rothschild) taken from a lemming mouse, *Synaptomys cooperi*, near Sevey, St. Lawrence County, on August 18, 1965.

Since this species has been recorded from several other northeastern states (Figure 1), it was expected that it would eventually be found in New York. This specimen, however, was unusual in two respects. It was taken in late summer, whereas all specimens previously reported from the eastern United States were taken from September to May, and it was found on a lemming mouse, whereas 24 of 33 specimens for which I have found data have been taken from the meadow mouse, *Microtus pennsylvanicus*.

Since *Microtus* is one of the most abundant of small mammals in the east, it has seemed strange that *P. hamifer* has not appeared more frequently in collections. The present record suggests the possibility that the flea may be a parasite of lemming mice, with meadow mice only a secondary or accidental host. Since lemming mice are very rarely collected in any numbers, and even less commonly in the colder months, the apparent rarity of the species would be explained if it were a parasite of this host. Further, if it is a flea which seldom leaves the nest of the host, its apparent rarity is even easier to explain.

A comparable case is that of *Conorhinopsylla stanfordi* Stewart. The type host of this flea is the red squirrel, *Tamiasciurus hudsonicus*, but despite the abundance of this host and its frequent collection, specimens of the flea were very rare in collections prior to 1950. Since that time, abundant evidence has shown that this is a nest parasite of the flying squirrel, *Glaucomys volans* (and possibly *G. sabrinus* as well), and large numbers can be collected by anyone willing to take the trouble to examine nests of this squirrel.

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Any collector who can examine winter nests of *Synaptomys cooperi* or of *Microtus pennsylvanicus* may contribute to the solution of the problem of the host relationship of this flea species.

Literature Cited

GEARY, JOHN M. 1959. The fleas of New York. Mem. 355, Cornell Univ. Agric. Exper. Station. 104 pp.

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